## **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions of claims in the application.

1. (Currently amended) A heat-resistant Ni-alloy composite having excellent high-

temperature oxidation resistance, comprising:

a Ni-alloy substrate and

a multi-layer surface structure formed on the Ni-alloy substrate, the multi-layer surface

structure being formed by Al-diffusing treatment of the Ni-alloy substrate containing Cr, or by

Al-diffusing treatment of the Ni alloy-substrate coated with a Cr-containing layer, comprising

an inner Cr layer with Cr content of about 85 atomic percent to about 95 atomic

 $\underline{\text{percent}}$  in the form of  $\alpha\text{-}Cr$  phase composed of precipitates between the substrate and an

outer layer and

the outer layer composed of a β phase (Ni-Al-Cr) and a γ' phase (Ni<sub>3</sub>Al(Cr)),

wherein the Al content in the outer layer is homogeneous and is at least 20 atomic percent,

and the Cr content in the outer layer is saturated,

wherein said multi-layer surface structure is formed by diffusing Al in a NiAl<sub>3</sub>

(+Ni<sub>2</sub>Al<sub>3</sub>) layer formed on the Ni-alloy substrate containing Cr.

2-4. (Cancelled).

Page 3

Attorney Docket No. 042541

5. (Original) The heat-resistant Ni-alloy composite according to claim 1, wherein the Ni-

alloy substrate comprises a heat-resistant Ni-based alloy or a Ni-based superalloy.

6. (Original) The heat-resistant Ni-alloy composite according to claim 1, wherein the

Ni-alloy substrate comprises a Ni-Cr-based alloy having a Cr content of at least 20 atomic

percent.

(New) A heat-resistant Ni-alloy composite having excellent high-temperature 7.

oxidation resistance, comprising:

a Ni-alloy substrate and

a multi-layer surface structure formed on the Ni-alloy substrate, comprising

an inner Cr layer with Cr content of about 85 atomic percent to about 95 atomic

percent in the form of α-Cr phase composed of precipitates between the substrate and an

outer layer and

the outer layer composed of a β phase (Ni-Al-Cr) and a γ' phase (Ni<sub>3</sub>Al(Cr)),

wherein the Al content in the outer layer is homogeneous and is at least 20 atomic percent,

and the Cr content in the outer layer is saturated,

wherein said multi-layer surface structure is formed by diffusing Al in a NiAl<sub>3</sub>

(+Ni<sub>2</sub>Al<sub>3</sub>) layer formed on a Cr-containing layer coated on the Ni alloy substrate.

Page 4

Amendment under 37 CFR §1.111 Application No. 10/506,537 Attorney Docket No. 042541

- 8. (New) The heat-resistant Ni-alloy composite according to claim 7, wherein the Cr-containing layer is a Ni-Cr-based alloy layer.
- 9. (New) The heat-resistant Ni-alloy composite according to claim 7 and 8, wherein the Cr-containing layer has a Cr content of at least 20 atomic percent.